

sure atrophy of nerve fibers, with early loss of function.

A fibroblastic diathesis is apparent in this patient's family history, dermatologic manifestations, with confirmation in the histopathology of surgical specimens. Collectively, the findings described may be regarded in the light of a constitutional predisposition in which multiple neurofibromatosis is a disease entity.

1930 Wilshire Boulevard.

ANAPHYLAXIS FOLLOWING THE USE OF PITUITARY EXTRACT

By R. A. KOCHER, M.D.

Carmel

THE phenomena of protein sensitization, and of anaphylaxis resulting from a subsequent parenteral administration of the specific protein, have long been recognized. No case of anaphylactic reaction following the use of pituitary extract, so far as I am aware, has appeared in the literature. Since, therefore, I recently witnessed a severe reaction of this kind in a patient treated by hypodermic injections of United States Pharmacopeia solutions of pituitary, it seems worth while to report the experience.

REPORT OF CASE

B. K., a woman, aged 40, had had measles, chickenpox, and scarlet fever as a child. Infestation with *Entameba histolytica*, for a period of ten years, finally was completely cured six years ago with no demonstrable sequelae. Occasional mild attacks of influenza. Tonsillectomy in 1920. Otherwise, in good health. Physical examination revealed no pathology. Leads an active domestic life, has two children, ages four years, and five months, respectively. Both cesarean deliveries. The patient had never experienced an attack of urticaria, hay fever, asthma, or any other allergic condition. On May 18, 1936, she suffered an attack of herpes zoster, with four patches of cutaneous vesicles involving some of the endings of the lower branches of the right cervical plexus. There were no symptoms of any primary condition to account for the herpes, with the exception of fatigue as the result of a period of overactivity occasioned by the care of her two children. Encouraged by the favorable results reported in recent years in the use of pituitary extract for the treatment of herpes zoster by Sedlick in 1930,¹ Niles in 1932,² Somers and Pouppirt in 1935,³ and by personal previous experience in two cases, I decided on its use in the present case. Following the method described by Somers and Pouppirt, this patient was given an initial injection of 0.2 cubic centimeter of posterior pituitary extract (U. S. P. ampoule, Squibb). There was no unfavorable reaction; this was followed in one hour with 0.5 cubic centimeter. There was a fleeting pallor and tremor following the injection, and considerable relief of pain. This dose was repeated in three hours, and during the following two days, injections of 0.5 cubic centimeter as pain reappeared; the intervals varied from two to four hours. By the end of the third day a total of 5 cubic centimeters of surgical pituitrin had been given, the pain had greatly subsided and the vesicles had begun to dry up.

On the sixth day, following the last injection of pituitary, and at about 4 p. m. the patient noted the appearance of four or five urticarial wheals about one-half centimeter in diameter, with intense itching, on the flexor surface of both forearms. By 8 p. m. similar scattered wheals appeared on all parts of the trunk and extremities. At five o'clock the following morning I was called and found the patient in shock, covered from head to foot with scattered

giant urticarial wheals; the largest, on the buttocks at the site of the original injections, measured 5 to 10 centimeters in diameter. There were nausea and vomiting; pulse 140, thready; blood pressure, 80/50; temperature, 97 degrees Fahrenheit. There was slight chill; patient complained of pain in the joints, intense itching, and a feeling she was going to faint. She was immediately given a hypodermic injection of epinephrin, one cubic centimeter, to which she responded within a few minutes by relief of the nausea and vomiting; improvement in pulse, rate 100, fair volume; blood pressure, 110/70. The intense itching and burning of the urticaria were not much relieved by the epinephrin. Along with soothing lotions and starch baths, injections of epinephrin, 0.5 cubic centimeter, were given at intervals of three to four hours. Giant urticarial wheals appeared in fresh crops about every six to ten hours, preceded by nausea and vomiting, ultimately involving every square inch of the body surface, not missing the vulva, rectum, scalp, palms of hands, and soles of the feet. By the end of four days the urticaria began to abate, and within twelve more hours had entirely disappeared, leaving a slight edema of the face for an additional twenty-four hours.

COMMENT

At the time of delivery of her last baby five months previously, this patient had received repeated injections of posterior pituitary extract for the control of uterine contraction as well as gas pains. There is no doubt that these were the sensitizing doses of pituitary. Pituitary extract contains the water-soluble principles from the fresh posterior lobes of the pituitary body of cattle. Whether any precautions are taken in the preparation of this extract to exclude water-soluble proteins or their derivatives, I do not know. In any event, it seems most probable that accompanying proteins rather than the active pituitary principle are responsible for the sensitization and subsequent anaphylactic reaction described. It has been mentioned that this patient had never before experienced an allergic reaction of any kind. Furthermore, there is nothing in her recent history, habits or behavior to lead one to suspect any other substance than pituitary extract as the offending agent.

SUMMARY

A woman, age forty, otherwise in good health, was treated for herpes zoster by injections of posterior pituitary extract. Six days following the last injection of pituitary, she suffered an attack of anaphylactic shock, characterized by nausea, vomiting, fall in blood pressure, rapid, thready pulse, painful joints, and generalized giant urticaria. She was treated by injections of epinephrin and after four days of intense suffering made a complete recovery. Sensitization to pituitary (probably contaminating proteins) at time of childbirth, five months previously.

P. O. Box 926,

REFERENCES

1. Sidlick, D. M.: The Use of Solution of Pituitary in Herpes Zoster, *Arch. Dermat. and Syph.*, 22:90, 1930.
2. Niles, H. D.: Herpes Zoster—Report of a Case of the Palm and Two Fingers, and Fifteen Other Cases Treated with Pituitrin, *New York State J. Med.*, Vol. 32, No. 13, p. 773, 1932.
3. Somers, Melvin R., and Pouppirt, Pearl S.: Herpes Zoster—Some of Its Clinical Aspects, *Calif. and West. Med.*, 42:370, 1935.